



Insights of a Number of Ongoing Research on Elites in Latin America

Topics, Methods and Possibilities for Comparison

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Three Research Projects

1. Open Data on Chilean Cabinets
2. Data Collection on Boards of Directors
3. NLP for Data Collection on Resignation Calls



Open Data on Chilean Cabinets

Data on Chilean Ministers (1990-2014)

Codebook v 3.3.6

Data Set on Chilean Ministers (1990-2014)

<https://doi.org/10.5281/zendos/5744536>

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This data set contains information in  Comma-Separated Values (CSV) format with Unicode encoding (UTF-8) (**N = 232**).

The data collection was carried out based on official sources such as archives of Congress and ministries, the National Library, and press archives.

Further Details

González-Bustamante and
Olivares (2022a)

Data on Chilean Undersecretaries (1990-2022)

This data set contains information in  Comma-Separated Values (CSV) format with Unicode encoding (UTF-8) (**N = 425**).

The data collection was carried out based on official sources such as archives of Congress and ministries, the National Library, and press archives.

Further Details

González-Bustamante and Olivares (2022b)

Codebook v 2.1.3

Data Set on Chilean Undersecretaries (1990-2022)

<https://doi.org/10.5281/zenodo.5715384>

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Preservation and Data Sharing

Both data sets are stored with version control on  GitHub repositories with controlled access with  Two-Factor Authentication (2FA) with cryptographic authentication FIDO2 and U2F.

Repositories are backed up on  Hierarchical File Server (HFS) for recovery in case of incidents. Backup is located on the  University of Oxford hub connected to Code42 Cloud Backup encrypted with 256-bit AES. Zenodo provides DOI.

The content is licensed under a  Creative Commons Attribution 4.0 International license (**CC BY 4.0**), and the underlying code is licensed under an MIT license. Codebooks were compiled with Xe^LA_TE_X using a code under an LPPL v1.3c license.

Example of Code to Import Data

```
1 ## GitHub Repository
2 github_1 <- "https://raw.githubusercontent.com/"
3 github_2 <- "bgonzalezbustamante/chilean-ministers/main/data/tidy/"
4
5 ## Chilean Ministers Data
6 chilean_ministers <- read.csv(paste(github_1, github_2,
7                               "Chilean_cabinets_1990_2014.csv", sep = ""),
8                               header = T, sep = ",", encoding = "UTF-8")
```

Further Details

Code chunk colours based on [Vibrant Ink Flavoured v1.2.1](#) template. Our codebooks and repositories present direct import codes for R and Python.

Data Collection on Boards of Directors

Data Collection on Boards of Directors (2001-2022)

We used data from the **Financial Market Commission**, which supervised more than 70% of financial assets in Chile, to identify board members and CEOs of a number of companies.

We have elaborated a list of **board members** and **CEOs** for **463 and 451 companies**, respectively.

Currently, we are collecting data from the **board members** list. Our progress is **21%**, which implies **4,280 individual observations**.

Work in Progress

This work in progress, coauthored with C Cisternas, is at an early stage. Our thanks to our research assistants V Liberona and M Carrillo.

Stochastic Actor-Oriented Models

Our empirical strategy will be similar to [González-Bustamante and Cisternas \(2022\)](#) based on SAO models developed by [Snijders \(2001; see also Snijders et al., 2010\)](#).

This approach is part of the family of models for **dynamic networks that show changes in the networks**, between two discrete points of time, by examining the evolution of ties between the actors ([Kalish, 2019; Pink et al., 2020](#)).

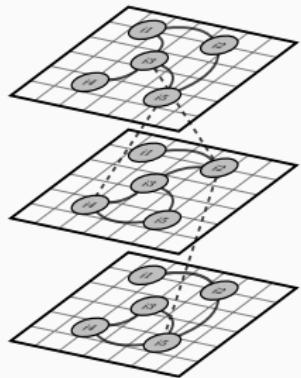
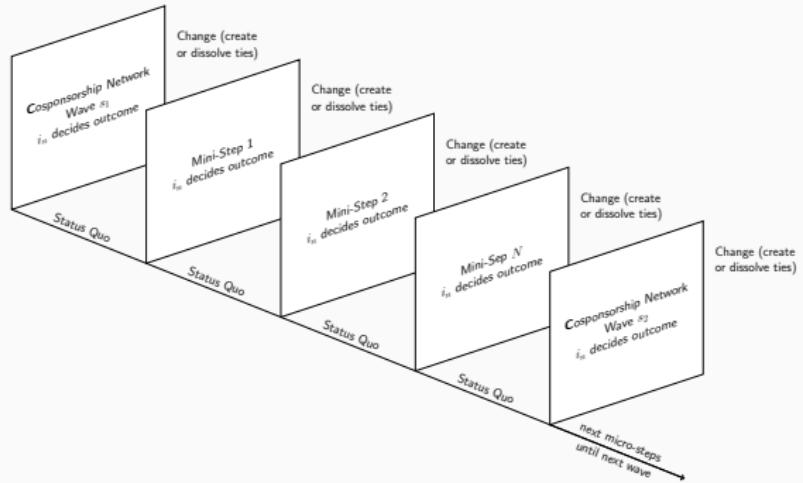
To implement the SAO analysis, we hope to employ Simulation Investigation for Empirical Network Analysis (**SIENA**; see [Snijders, 2001; Snijders and Pickup, 2017](#)).

Stochastic Actor-Oriented Models

The SAO analysis implies evaluating the evolution and formation of ties. Following Pink et al. (2020), between s_j and s_{j+1} there are three potential outcomes regarding the existing relation: (i) the creation of new ties; (ii) maintenance of the status quo; and (iii) dissolution of existing ties.

This decision occurs among what this approach calls **mini-steps calculated with simulations**, which consider potential decisions that an actor might make based on previous outcomes and the potential status of the social network that could be induced by possible actions by the individuals (Snijders, 2001; Snijders et al., 2010, see also Pink et al., 2020).

Example of Choice Modelling Networks Scheme



Source: [González-Bustamante and Cisternas \(2022\)](#).

NLP for Data Collection on Resignation Calls

NLP for Data Collection

This is a work in progress that presents a new data set created using **Natural Language Processing (NLP)** and **machine learning techniques**.

The data set contains detailed information on the cabinet turnover in 12 Latin American democracies from the time of redemocratisation between the 1970s and 1980s, depending on the case, up until the end of the latest presidential terms.

We used a number of sources of public information and press reports that were digitised with data mining algorithms. Using machine learning models, we were able to identify **ministerial resignation calls** (empirically efficient indicators of random shocks; see [Berlinski et al., 2010](#)).

This data is **completely novel for Latin American presidentialisms**.

Further Details

[González-Bustamante \(2022\)](#)

Detail of the Batches of the LAWR Archives

Batch	Archives	Years	Format	Volume
Batch-01	LAWR-1975 to LAWR-1979 Including 1997	5	CSV UTF-8	9.56 MB
Batch-02	LAWR-1980 to LAWR-1998 Excluding 1997 Including the first half of 2003	18.5	PNG images	38.5 GB
Batch-03	LAWR-1999 to LAWR-2021 Excluding the first half of 2003	22.5	PDF files	341 MB

Note: Revision of 12 Latin American countries thanks to St Hilda's College Muriel Wise Fund and subscriptions of the Bodleian Libraries at the University of Oxford.

Tesseract OCR Algorithm



How Domingo Cavallo rose to become Menem's virtual prime minister

Argentina is still fully debating what lay behind the sudden reorganization of the government. Ernesto González and his replacement as Minister of Economy, Domingo Cavallo, are both considered to be the main beneficiaries of the reshuffle. The simple explanation — the result of a coup d'état — is that the other side — is dismissed as sufficient to explain the abrupt and widespread corruption in the highest echelons of the state. In fact, it is said, there is no single explanation that covers all sorts of political factors.

One thing seems certain: that during the last few days, the resignation of Menem — and an abrupt change in the government — has forced President Carlos Menem to choose his own timing. In the current, all González was chosen to choose his own timing.

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This is a time when even such a prominent figure as the Vice-President of the country, Raúl Alfonsín, has accepted a widely accepted version of the facts. He has accepted the need to support Cavallo as his economy minister. The reason is that he expects him to be able to implement the restructuring which he expected would be carried out by the new president. In this context, all González will be chosen to choose his own timing.

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Year and Week

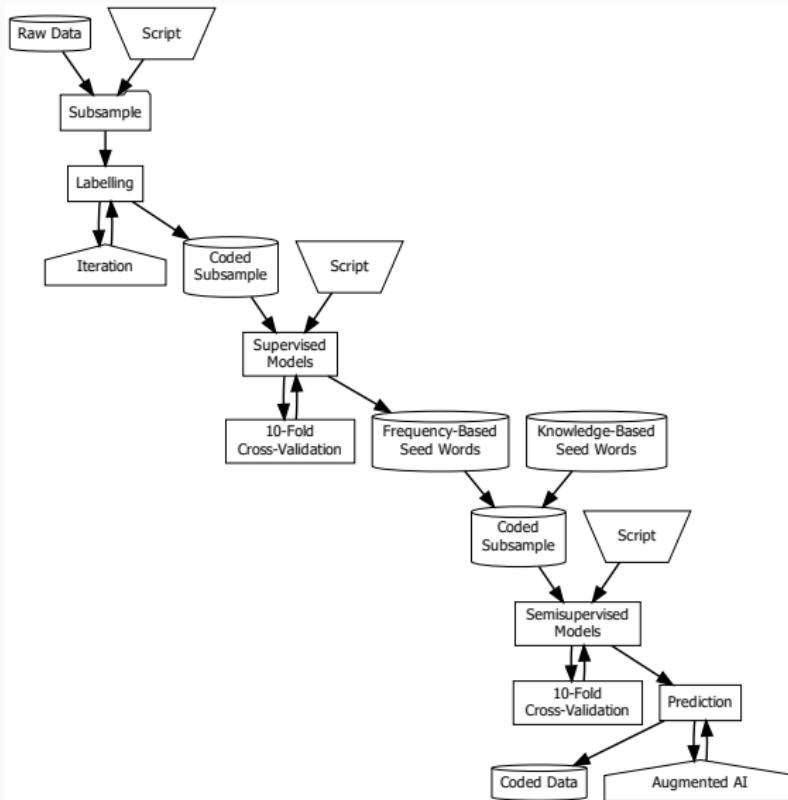
Headline

Paragraphs

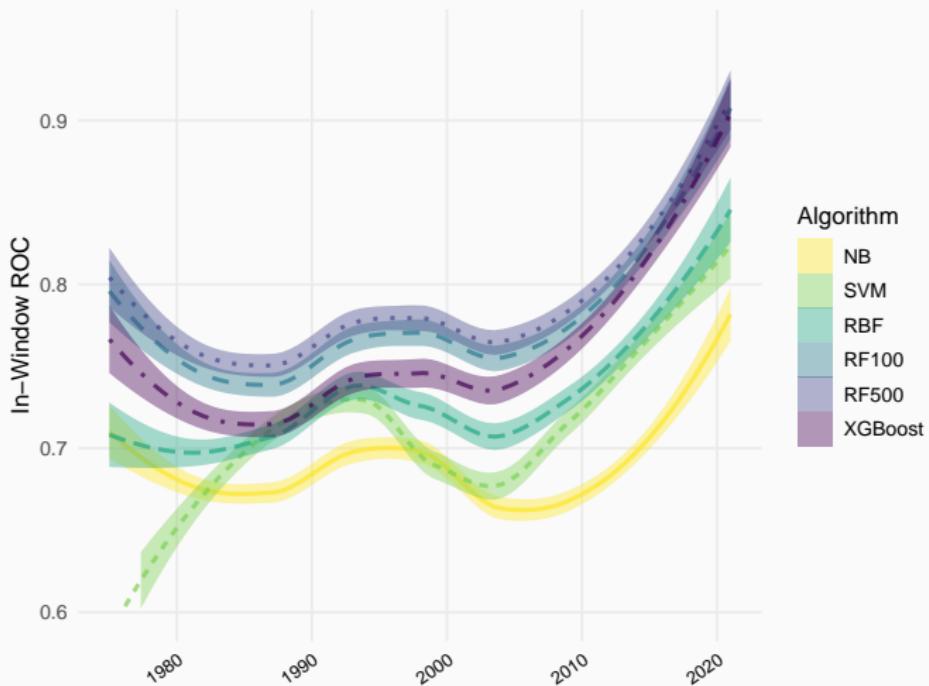


Tab-Stop Lines — Column Layout — Segmented Blocks

Machine Learning Algorithms Training Pipeline

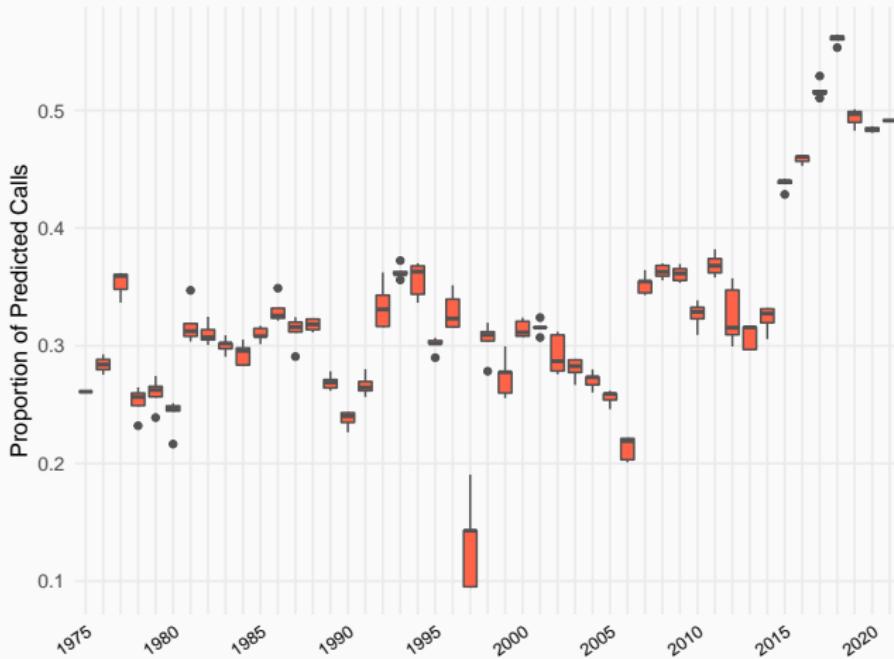


Performance of the Semisupervised Models (1975-2021)



Note: Indicators 10-fold cross-validated in a five-year rolling window.

Predicted Ministerial Resignation Calls (1975-2021)



Note: Predictions proportion over the mentions carried out with the ensemble semisupervised Random Forest (500 trees) in the five-year rolling window.

Preservation and Data Sharing

The data set will be deposited in the digital repository  **Oxford Research Archive for Data** (ORA-Data) in  CSV UTF-8 format with its codebook and standardised metadata. The data set will remain **under embargo** until October 2023 (to be confirmed).

It will then be available for reuse under an  **open-access licence** that allows sharing and adapting the material without additional restrictions as long as appropriate acknowledgement is given.

Further technical details on storage, formats and replicability are available in the Data Management Plan (DMP ID 85349).

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Thank you very much!

